

#### ABSTRACT OF THE DISCLOSURE

A composition for forming a rigid polyurethane foam, characterized in that a composition comprising an organic polyisocyanate, a polyol, a catalyst, a foam stabilizer, water, and if necessary, a hydrochlorofluorocarbon, as a foaming agent, a low molecular weight compound (a) having an unsaturated bond and carbonyl group which are adjacent to each other in an amount of 0.01 to 20 parts by weight per 100 parts by weight of said polyol, as a modifying agent, and if necessary, other auxiliary agent(s). The use of a low molecular weight compound having an unsaturated bond and carbonyl group which are adjacent to each other, as a modifying agent could remarkably improve the brittleness and adhesive properties of a rigid polyurethane foam which was foamed with water, or with water and an HFC, without affecting the reactivity or dimensional stability of the polyurethane foam.